

## Claims

1. Apparatus for receiving parallel transmitted data via plurality of channels characterised by means (30) to generate a clock signal (50) on the basis of the received data and means (40) associated with each of said channels to synchronise data received on the associated channel with the generated clock signal (50).
2. Apparatus as claimed in claim 1 in which the means (30) to generate a clock signal includes clock signal delay means (32) which delay the clock signal (50) by a predetermined amount with respect to a clock input derived from the received data.
3. Apparatus as claimed in claim 2 in which the predetermined amount is half a maximum delay ( $T_d$ ) available to each data channel.
4. Apparatus as claimed in claim 1, 2 or 3 in which the synchronising means (40) each include variable delay means (42) for applying a variable delay to each of the channels.
5. Apparatus as claimed in claim 4 in which each variable delay means (42) is incremented over a range of available delays (0- $T_d$ ) and is controlled to revert to its maximum delay in the event that the maximum delay ( $T_d$ ) is insufficient to achieve synchronisation, or to its maximum delay ( $T_d$ ) if its maximum delay is insufficient to achieve synchronisation.

6. Apparatus as claimed in claim 4 or 5 in which the variable delay means (42) include means (104) for mixing a non-delayed signal with a maximally delayed signal in variable proportions to output a variable delay signal.

7. Apparatus as claimed in claim 6 in which said mixing means includes a plurality of delay stages (112).

8. A method of synchronising data signals received via a plurality of channels comprising the steps of:

generating a clock signal (50) on the basis of the received data; and

synchronising data received on each channel with the generated clock signal (50).

9. A method as claimed in claim 8 in which the clock signal (50) is delayed by a predetermined amount with respect to a clock input derived from said received data .

10. A method as claimed on claim 9 in which said predetermined amount is half maximum delay ( $T_d$ ) available to each data channel.

11. A method as claimed in claim 8, 9 or 10 in which a variable delay on each of the channels is incremented over a range of available delays ( $0-T_d$ ) and in which the delay is controlled to revert to its minimum in the event that the maximum delay is insufficient to achieve synchronisation and vice versa.